UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT TACOMA

SUSAN SOTO PALMER, et al.,	Case No. 3:22-cv-5035-RSL
Plaintiffs,	
v.	EXHIBIT 2: SECOND DECLARATION OF DR. LOREN COLLINGWOOD
Secretary of State STEVEN HOBBS, in his official capacity as Secretary of State of Washington, et al.,	
Defendants.	Judge: Robert S. Lasnik

Declaration of Dr. Loren Collingwood

Pursuant to 28 U.S.C. §1746, I, Loren Collingwood, state as follows:

1. I am an associate professor of political science at the University of New Mexico in Albuquerque, New Mexico, and have researched and/or taught in this area since 2003.

2. I received a Ph.D. in political science from the University of Washington in 2012, with a focus on race, ethnicity, and political/statistical methodology. I received a B.A. in psychology from California State University, Chico in 2002.

3. I was an associate professor of political science and co-director of civic engagement at the Center for Social Innovation at the University of California, Riverside. I have published two books with Oxford University Press, 39 peer-reviewed journal articles, and nearly a dozen book chapters.

4. In between my B.A. and Ph.D., I spent 4 years working in private consulting for the survey research firm Greenberg Quinlan Rosner Research in Washington, D.C. I also founded the research firm, Collingwood Research, which focuses primarily on the statistical and demographic analysis of political data for a wide array of clients, and lead redistricting and map-drawing and demographic analysis for the Inland Empire Funding Alliance in Southern California. I was the redistricting consultant for the West Contra Costa Unified School District, CA, independent redistricting commission in which I drew court-ordered single member districts.

5. I am under contract with the Roswell, New Mexico Independent School District to draw school districts maps.

6. I have written at least five peer-reviewed papers using ecological inference methods to estimate vote choice.

7. I served as a testifying expert for the plaintiff in the Voting Rights Act Section 2 case *NAACP v. East Ramapo Central School District, No. 17 Civ. 8943 (S.D.N.Y.)*, on which I worked from 2018 to 2020. In that case, I used statistical software to identify the racial/ethnic demographics of voters (a procedure known as Bayesian Improved Surname Geocoding -- BISG) and estimate candidate preference by race using ecological data.

8. I am the quantitative expert in *LULAC vs. Pate (Iowa), 2021*, and have filed an expert report in that case. In that report, I used BISG to estimate individual-level race using surname and address.

9. I was the racially polarized voting expert for plaintiff in *East St. Louis Branch NAACP, et al. vs. Illinois State Board of Elections, et al.*, having filed two reports in that case. I am the racially polarized voting expert for plaintiff in *Johnson, et al., v. WEC, et al., No. 2021AP1450-OA*, having filed three reports in that case. I am the Senate Factors expert for plaintiff in *Pendergrass v. Raffensperger (N.D. Ga. 2021)*, having filed a report in that case.

10. Plaintiffs have retained me as an expert in this matter, and have asked me to analyze whether there is racially polarized voting in the Yakima Valley region, to analyze

demographic data, to examine map plan statistics, and to conduct electoral performance analyses.

11. In a declaration dated February 25, 2022, I presented my findings with respect to racially polarized voting and concluded that racially polarized voting is present in the region, that the recently passed Legislative District 15 will not enable Latinos the ability to elect candidates of choice, but that an alternative district could clearly enable Latinos the ability to elect their preferred candidate.[1]

12. In this declaration, I analyze plaintiffs' proposed plan, which includes their proposed remedial District 14. I conduct an electoral performance analysis of remedial District 14 and evaluate the plan's conformance with traditional redistricting criteria.

13. I have conducted an electoral performance analysis of the eight statewide contests in the plaintiff's remedial District 14. Figure 1 presents the results. Electoral performance analysis takes precincts that fall into the new legislative district then reallocates candidate votes from previous elections to determine how the candidates performed in that particular district configuration. I use statewide results in this case because old legislative seats do not completely overlap the new district. Figure 1 shows the performance analysis results for plaintiff's proposed Legislative District 14. The proposed remedial district is both majority Hispanic CVAP (52.4%) and performs to enable Hispanic voters to elect their candidate of choice. In this district, the Hispanic-preferred candidate wins eight of eight contests.

14. The plaintiff map (Legislative District 14) -- as shown in Figure 2 -- will clearly enable Latinos the ability to elect their preferred candidate. In every single election I examined, the Latino-preferred candidate wins, for a rate of 100%. The average margin of victory is 18.1%.

15. The plaintiff's proposed Washington Legislative District map fits with traditional redistricting principles. Plaintiff's proposed map is composed of compact, contiguous districts; within the population deviation; and to the extent possible limits splitting precincts.

16. In the plaintiff plan, each district is very similar in terms of total population. The minimum (0.125%, i.e., 0.00125) and maximum (0.1211%, i.e., 0.001211) deviations below and above the ideal population size are significantly lower than 1%.

17. Reock and Polsby-Popper scores are measures used to assess a district and plan's overall compactness. Compactness scores range from 0-1, with 1 being perfect compactness, like a circle. The plaintiff plan's overall mean Reock compactness score is 0.39; the mean Polsby-Popper score is 0.31. Both measures fall within accepted

---

[1] I use the term Hispanic and Latino interchangeably to refer to the Census definition of the ethnic category Hispanic.

compactness scores.[2] These scores are similar to the state's enacted plan: Reock at 0.39, and Polsby-Popper at 0.32.

18. In the plaintiff's proposed plan, 20 of Washington's 39 counties are split into multiple districts. This splitting occurs 58 times. The enacted Washington legislative map contains 18 county splits, with splits occurring 59 times.

19. The plaintiff plan includes 280 precinct (voting district) splits between districts. This compares favorably against the enacted Washington legislative map, which contains 287 precinct splits.

20. As additional data becomes available and relevant, I will continue to examine and reserve the right to supplement this declaration.

21. I swear this statement is accurate to the best of my knowledge and belief.

3/25/22

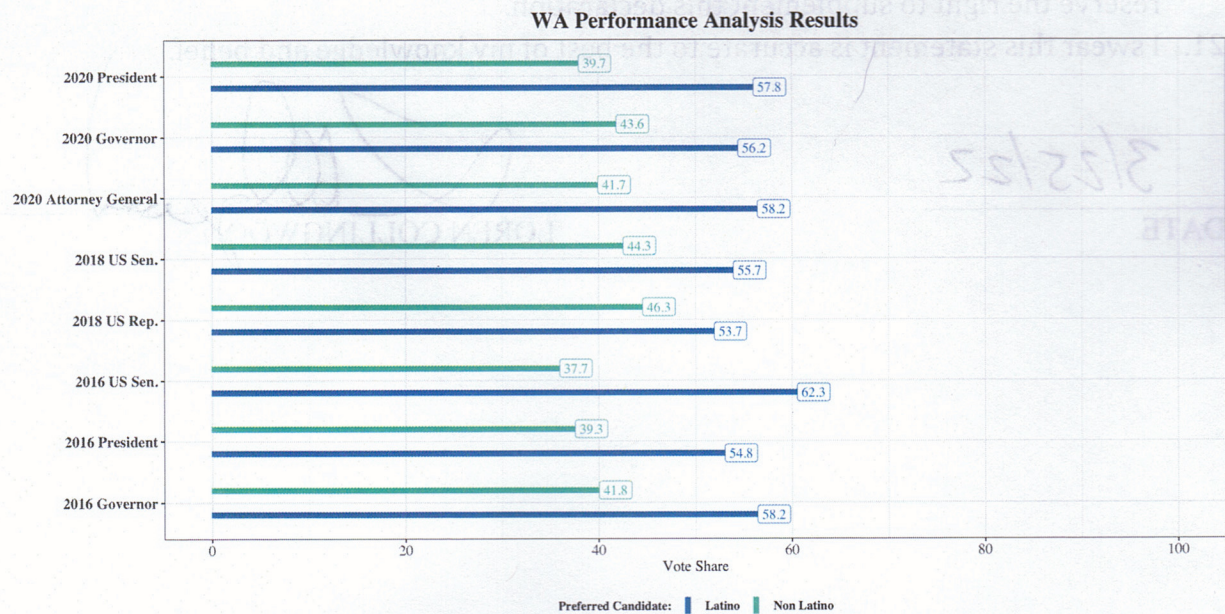DATE   LOREN COLLINGWOOD

---

[2] See Bullock, Charless III, "Redistricting: The Most Political Activity in America (second edition). Rowman & Littlefield, 2021.

Figure 1. Performance analysis of eight statewide contests subset to the plaintiff's District 14 plan.

WA Performance Analysis Results

Contest	Non Latino	Latino
2020 President	39.7	57.8
2020 Governor	43.6	56.2
2020 Attorney General	41.7	58.2
2018 US Sen.	44.3	55.7
2018 US Rep.	46.3	53.7
2016 US Sen.	37.7	62.3
2016 President	39.3	54.8
2016 Governor	41.8	58.2

Vote Share

Preferred Candidate: Latino   Non Latino

Figure 2. Plaintiff map, Legislative District 14.